

CLAIM AMENDMENTS

1-57 (Cancelled)

58. (New) A composition for increasing carnitine retention in the animal and/or human biological tissue, the composition comprising a carnitine substance and an agent to increase blood/plasma insulin concentration.

59. (New) A composition for use in the manufacture of a medicament to influence carnitine retention in the animal and/or human biological tissue, the composition comprising a carnitine substance and an agent to stimulate insulin release in the body.

60. (New) A composition according to claim 58 wherein the agent is operable to increase sodium dependent carnitine uptake into tissue cells, in particular skeletal muscle, liver and/or kidney cells.

61. (New) A composition according to claim 58 wherein the agent is operable to increase insulin activity in the tissue.

62. (New) A composition according to claim 61 wherein the agent is operable to increase insulin activity in the tissue by increasing the amount of insulin in the blood/plasma.

63. (New) A composition according to claim 58 wherein the agent comprises a carbohydrate, and/or an active derivative thereof, and/or an amino acid and/or a protein.

64. (New) A composition according to claim 63 wherein the agent is a carbohydrate and/or a derivative of a carbohydrate.

65. (New) A composition according to claim 63 wherein the carbohydrate is a simple carbohydrate, and/or the derivative of the carbohydrate is a derivative of a simple carbohydrate.

66. (New) A composition according to claim 64 wherein the carbohydrate is a simple sugar, and/or the derivative of the carbohydrate is a derivative of a simple sugar.

67. (New) A composition according to claim 65 wherein the carbohydrate comprises glucose, sucrose, and/or fructose, and/or the

derivative of the carbohydrate is a derivative of glucose, sucrose and/or fructose.

68. (New) A composition according to claim 58 wherein the amount by weight of the agent is between 10 and 150 times the amount by weight of the carnitine substance.

69. (New) A composition according to claim 58 wherein the amount by weight of the agent is between 10 and 95 times the amount by weight of the carnitine substance.

70. (New) A composition according to claim 58 wherein the amount by weight of the agent is between 10 and 40 times the amount by weight of the carnitine substance.

71. (New) A composition according to claim 58 comprising substantially 0.25g to 3g carnitine substance and between 2.5g and 450g of the agent.

72. (New) A composition according to claim 58 comprising substantially 0.25g to 3g carnitine substance and between 2.5g and 285g of the agent.

73. (New) A composition according to claim 58 comprising substantially 0.25g to 3g carnitine substance and between 2.5g and 120g of the agent.

74. (New) A composition according to claim 58 in the form of a solution.

75. (New) A composition according to claim 58 in the form of an aqueous solution.

76. (New) A food supplement comprising a carnitine substance and an agent to increase blood/plasma insulin concentration.

77. (New) A food supplement according to claim 76 wherein the agent is operable to increase sodium dependent carnitine uptake into tissue cells, in particular skeletal muscle, liver and/or kidney cells.

78. (New) A food supplement according to claim 76 wherein the agent is operable to increase insulin activity in the tissue..

79. (New) A food supplement according to claim 78 wherein the agent is operable to increase the insulin activity in the tissue by increasing the amount of insulin in the blood/plasma.

80. (New) A food supplement according to claim 76 wherein the agent comprises a carbohydrate, and/or an active derivative thereof and/or an amino acid and/or a protein.

81. (New) A food supplement according to claim 80 wherein the agent is a carbohydrate and/or a derivative of a carbohydrate.

82. (New) A food supplement according to claim 80 wherein the carbohydrate is a simple carbohydrate and/or the derivative of the carbohydrate is a derivative of a simple carbohydrate.

83. (New) A food supplement according to claim 82 wherein the carbohydrate is a simple sugar, and/or the derivative of the carbohydrate is a derivative of a simple sugar.

84. (New) A food supplement according to claim 81 wherein the carbohydrate comprises glucose, sucrose and/or fructose, and/or the derivative of the carbohydrate comprises a derivative of glucose, sucrose and/or fructose.

85. (New) A food supplement according to claim 76 wherein the amount by weight of the agent is between 10 and 150 times the amount by weight of the carnitine substance.

86. (New) A food supplement according to claim 76 wherein the amount by weight of the agent is between 10 and 95 times the amount by weight of the carnitine substance.

87. (New) A food supplement according to claim 76 wherein the amount by weight of the agent is between 10 and 40 times the amount by weight of the carnitine substance.

88. (New) A food supplement according to claim 76 comprising substantially 0.25g to 3g carnitine substance and between 2.5g and 450g of the agent.

89. (New) A food supplement according to claim 76 comprising substantially 0.25g to 3g carnitine substance and between 2.5g and 285g of the agent.

90. (New) A food supplement according to claim 76 comprising substantially 0.25g to 3g carnitine substance and between 2.5g and 120g of the agent.

91. (New) A food supplement according to claim 76 in the form of a solution.

92. (New) A food supplement according to claim 76 in the form of an aqueous solution.

93. (New) A method of increasing carnitine retention in the animal and/or human biological tissue, the method comprising administering to the body a carnitine substance and an agent to increase blood/plasma insulin concentration.

94. (New) A method according to claim 93 wherein the method increase carnitine retention in the tissue by increasing the transportation of the carnitine substance, or a derivative thereof into tissue cells.

95. (New) A method according to claim 94 wherein transportation is increased by stimulation of a sodium dependent transport protein and substantially simultaneously increasing blood/plasma carnitine concentration.

96. (New) A method according to claims 93 wherein the agent is operable to increase sodium dependent carnitine uptake into tissue cells, in particular skeletal muscle, liver and/or kidney cells.

97. (New) A method according to claim 93 wherein the agent is operable to increase insulin activity in the tissue.

98. (New) A method according to claim 97 wherein the agent is operable to increase insulin activity in the tissue by increasing the amount of insulin in the blood/plasma.

99. (New) A method according to claim 93 wherein the agent comprises a carbohydrate, and/or an active derivative thereof, and/or an amino acid and/or a protein.

100. (New) A method according to claim 99 wherein the agent is a carbohydrate and/or a derivative of a carbohydrate.

101. (New) A method according to claim 99 wherein the carbohydrate is a simple carbohydrate, and/or the derivative of the carbohydrate is a derivative of a simple carbohydrate.

102. (New) A method according to claim 101 wherein the carbohydrate is a simple sugar, and/or the derivative of the carbohydrate is a derivative of a simple sugar.

103. (New) A method according to claim 101 wherein the carbohydrate comprises glucose, sucrose and/or fructose, and/or the derivative of the carbohydrate is a derivative of glucose, sucrose and/or fructose.

104. (New) A method according to claim 93 wherein the method involves oral administration and ingestion of the carnitine substance and agent.

105. (New) A method according to claim 104 wherein the oral administration and ingestion of the carnitine substance and the agent occurs simultaneously.

106. (New) A method according to claim 93 wherein the amount by weight of the agent is between 10 and 150 times the amount by weight of the carnitine substance.

107. (New) A method according to claim 93 wherein the amount by weight of the agent is between 10 and 95 times the amount by weight of the carnitine substance.

108. (New) A method according to claim 94 wherein the amount by weight of the agent is between 10 and 40 times the amount by weight of the carnitine substance.

109. (New) A method according to claim 93 wherein substantially 0.25g to 3g of the carnitine substance and between 2.5g and 450g of the agent are administered.

110. (New) A method according to claim 87 when substantially 0.25g to 3g of the carnitine substance and between 2.5g and 285g of the agent are administered.

111. (New) A method according to claim 93 wherein substantially 0.25g to 3g of the carnitine substance and between 2.5g and 120g of the agent are administered.